

## LC 2012 transmissive SLM

The LC 2012 phase mostly Spatial Light Modulator models are based on translucent LCD microdisplays with 1024 x 768 pixel resolution and 36  $\mu\text{m}$  pixel pitch.

The LC 2012 is our basic Spatial Light Modulator system, and the device is mainly intended for proof of concepts and education.

Based on a twisted nematic (TN) liquid crystal display only phase mostly modulation is possible as the twist always causes a coupled polarization effect (amplitude modulation). The SLM can be used for phase (phase mostly) or amplitude modulation applications dependent on the configuration. The mode depends on the incident polarization and polarizer-analyzer settings.

The SLM provides a phase shift of about  $2\pi$  at 450 nm, about  $1.8\pi$  at 532 nm and around  $1\pi$  at 800 nm.

The microdisplay and drive electronics are packaged into a compact box for easy integration into optical setups. The LC 2012 is addressed using a standard HDMI interface and brightness and contrast settings can be performed using an USB interface.

You can find more information on the devices, information on software and reference publications at <https://holoeeye.com/products/spatial-light-modulators/lc-2012-spatial-light-modulator-transmissive/>



### Key Features:

- Easy plug and play
- Transmissive design
- Compact design
- Straight forward integration into optical setups
- Superior software

### Why Use 'LC 2012 SLM's from Laser Components USA?

- High quality performance
- Simple proof of concepts
- Education Kit option
- Exceptional technical support (through HOLOEYE Germany)

## Specifications LC 212

Device	$\lambda$ Range	Maximum Phase	Transmittance
LC 212	420 – 850 nm	2 $\pi$ @ 450 nm 1 $\pi$ @ 450 nm	28%

